

数学与系统科学研究院

计算数学所学术报告

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报告题目:

**Global and local convergence of a  
line-search filter method for  
nonlinear semidefinite programming**

邀请人: 戴彧虹 研究员

报告时间: 2015 年 11 月 18 日 (周三)

下午 15:00-16:00

报告地点: 科技综合楼三层

311 报告厅

## Abstract:

In this paper, we propose a line-search filter method for nonlinear semidefinite programming (NLSDP). It uses a sequential semidefinite programming (SSDP) subproblem to generate a search direction and the line-search filter technique to judge whether to accept the trial step or not. The global convergence is analyzed under mild conditions. Moreover, we employ a second-order correction step to avoid the Maratos effect and prove the superlinear local convergence under the strict complementarity and the strong second order sufficient condition with the sigma term. Some preliminary numerical results are reported.

欢迎大家参加！